

## INFORMATION DISCLOSURE CITATION

## DOCKET NUMBER

## APPLICATION NUMBER

50623.55

09/967,186

## APPLICANTS:

Jeffrey T. Ellis et al.

## FILING DATE

September 28, 2001

## EXAMINER

Unassigned

## GROUP ART UNIT

Unassigned

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL | REF | DOCUMENT<br>NUMBER | DATE     | NAME               | CLASS | SUB<br>CLASS | FILING DATE<br>IF<br>APPROPRIATE |
|----------------------|-----|--------------------|----------|--------------------|-------|--------------|----------------------------------|
| JF                   | A   | 4,801,538          | 1/31/89  | Hanada et al.      | 435   | 25           |                                  |
|                      | B   | 4,966,148          | 10/30/90 | Millar             | 128   | 637          |                                  |
|                      | C   | 5,124,130          | 6/23/92  | Costello et al.    | 422   | 82.06        |                                  |
|                      | D   | 5,176,882          | 1/5/93   | Gray et al.        | 422   | 82.07        |                                  |
|                      | E   | 5,434,085          | 7/18/95  | Capomacchia et al. | 436   | 116          |                                  |
|                      | F   | 5,582,170          | 12/10/96 | Soller             | 128   | 634          |                                  |
|                      | G   | 5,603,820          | 2/18/97  | Malinski et al.    | 205   | 781          |                                  |
|                      | H   | 5,617,870          | 4/8/97   | Hastings et al.    | 128   | 692          |                                  |
|                      | I   | 5,776,100          | 7/7/98   | Forman             | 604   | 102          |                                  |
|                      | J   | 5,788,647          | 8/4/98   | Eggers             | 600   | 526          |                                  |
|                      | K   | 5,806,517          | 9/15/98  | Gerhardt et al.    | 128   | 635          |                                  |
|                      | L   | 5,852,058          | 12/22/98 | Cooke et al.       | 514   | 564          |                                  |
|                      | M   | 5,860,938          | 1/19/99  | Lafontaine et al.  | 600   | 585          |                                  |
|                      | N   | 5,885,842          | 3/23/99  | Lai                | 436   | 116          |                                  |
|                      | O   | 5,935,075          | 8/10/99  | Casscells et al.   | 600   | 474          |                                  |
|                      | P   | 5,980,705          | 11/9/99  | Allen et al.       | 204   | 291          |                                  |
|                      | Q   | 6,002,817          | 12/14/99 | Kopelman et al.    | 385   | 12           |                                  |
| Jr                   | R   | 6,100,096          | 8/8/00   | Bollinger et al.   | 436   | 116          |                                  |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

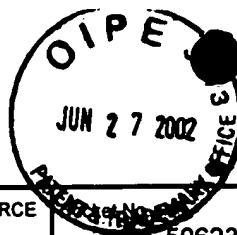
|    |   |   |
|----|---|---|
| JF | S | Bennett et al., <i>Conductive Polymeric Porphyrin Films: Application in the Electrocatalytic Oxidation of Hydrazine</i> , Chem. Mater. 1991, 3, pp. 490-495.                  |
|    | T | Heikkila et al., <i>A Sensitive Assay for Superoxide Dismutase Based on the Autoxidation of 6-Hydroxydopamine</i> , Analytical Biochemistry 75, 1976, pp. 356-362.            |
|    | U | Hishikawa et al., <i>Pulsatile Stretch Stimulates Superoxide Production in Human Aortic Endothelial Cells</i> , Circulation, 1997, 96:3610-3616.                              |
|    | V | Niebauer et al., <i>Local L-Arginine Delivery After Balloon Angioplasty Reduces Monocyte Binding and Induces Apoptosis</i> , Circulation, 1999, 100:1830-1835.                |
|    | W | Oemar et al., <i>Reduced Endothelial Nitric Oxide Synthase Expression and Production in Human Atherosclerosis</i> , Circulation, 1998, 97:2494-2498.                          |
| JF | X | van der Loo et al., <i>Inactivation of Nitric Oxide by Superoxide is a Mechanism Leading to Age-Related Endothelial Dysfunction</i> , JACC February 2000, p. 277A (Abstract). |

DATE CONSIDERED

5/29/03

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not information and not considered. Include copy of this with next communication to applicant.

|  |          |   |                     |                    |                 |                            |
|--|----------|---|---------------------|--------------------|-----------------|----------------------------|
| <b>FORM PTO-1449 (Modified)</b>  |          | US DEPARTMENT OF COMMERCE   |                     | Docket No.         | Application No. |                            |
| Approved for use through 10/31/2002  |          | US Patent and Trademark Office  |                     | 50623.55           | 09/967,186      |                            |
| <b>INFORMATION DISCLOSURE CITATION</b><br>in an Application<br>(Use several sheets if necessary)   |          |   |                     | Applicant          |                 |                            |
|  |          |   |                     | Jeffrey T. Ellis   |                 |                            |
|  |          |   |                     | Filing Date        | Group Art Unit  |                            |
|  |          |   |                     | September 28, 2001 | Unknown         |                            |
| <b>U.S. PATENT DOCUMENTS</b>   |          |   |                     |                    |                 |                            |
| Examiner Initial   | Ref. No. | Document Number   | Date of Patent      | Name               | Class           | Filing Date If Appropriate |
|  | A1       |   |                     |                    |                 |                            |
| <b>FOREIGN PATENT DOCUMENTS</b>  |          |   |                     |                    |                 |                            |
| Examiner Initial   | Ref. No. | Document Number   | Date of Publication | Country            | Class           | Subclass                   |
|  | B1       |   |                     |                    |                 |                            |
| <b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, etc.)  |          |   |                     |                    |                 |                            |
| JF   | C1       | Barker et al., <i>Ratiometric And Fluorescence-Lifetime-Based Biosensors Incorporating Cytochrome C' And The Detection Of Extra- And Intracellular Macrophage Nitric Oxide</i> , Anal. Chem., May 1, 1999, 71:1767-1772.  |                     |                    |                 |                            |
|  | C2       | Barker et al., <i>Development And Cellular Applications Of Fiber Optic Nitric Oxide Sensors Based On A Gold-Adsorbed Fluorophore</i> , Anal. Chem., Dec. 1, 1998, 70:4902-4906.   |                     |                    |                 |                            |
|  | C3       | Barker et al., <i>Fiber-Optic Nitric Oxide-Selective Biosensors And Nanosensors</i> , Anal. Chem., March 1, 1998, 70:971-976.   |                     |                    |                 |                            |
|  | C4       | Barker et al., <i>Cellular Applications Of A Sensitive And Selective Fiber-Optic Nitric Oxide Biosensor Based On A Dye-Labeled Heme Domain Of Soluble Guanylate Cyclase</i> , Anal. Chem., June 1, 1999, 71:2071-2075.    |                     |                    |                 |                            |
|  | C5       | Bedioui et al., <i>Practical Aspects And Methodological Approaches To Achieve Electrochemical Detection Of Submicromolar NO In Biological Systems</i> , Biosens. & Bioelectron., 1998, 13:227-230.                        |                     |                    |                 |                            |
|  | C6       | Bedioui et al., <i>Elaboration And Use Of Nickel Planar Macrocyclic Complex-Based Sensors For The Direct Electrochemical Measurement Of Nitric Oxide In Biological Media</i> , Biosens. & Bioelectron., 1997, 12:205-212. |                     |                    |                 |                            |
|  | C7       | Brovkovich et al., <i>Direct Electrochemical Measurement Of Nitric Oxide In Vascular Endothelium</i> , J. Pharm. Biomed. Anal., 1999, 19:135-143.   |                     |                    |                 |                            |
|  | C8       | Fiaccabrino et al., <i>Electrochemical Characterization Of Thin-Film Carbon Interdigitated Electrode Arrays</i> , Analytica Chimica Acta, 1996, 326:155-161.  |                     |                    |                 |                            |
|  | C9       | Lisdat et al., <i>Superoxide Dismutase Activity Measurement Using Cytochrome c-Modified Electrode</i> , April 1, 1999, Anal. Chem. 71:1359-1365.  |                     |                    |                 |                            |
| JF   | C10      | Malinski et al., <i>Diffusion Of Nitric Oxide In The Aorta Wall Monitored In Situ By Porphyrinic Microsensors</i> , Biochem. Biophys. Res. Commun., June 10, 1993, 193:1076-1082.   |                     |                    |                 |                            |
| EXAMINER   |          |   |                     | DATE CONSIDERED    |                 |                            |
|  |          |   |                     | 5/23/03            |                 |                            |
| EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.<br>Include copy of this form with next communication to applicant. |          |   |                     |                    |                 |                            |



COPY OF PAPERS  
ORIGINALLY FILED

Page 2 of 2

|  |     |  |  |                                   |                            |
|--|-----|--|--|-----------------------------------|----------------------------|
| <b>FORM PTO-1449 (Modified)</b><br>Approved for use through 10/31/2002   |     | US DEPARTMENT OF COMMERCE<br>US Patent and Trademark Office  |  | Patent No. 50623.55               | Application No. 09/967,186 |
| <b>INFORMATION DISCLOSURE CITATION</b><br>in an Application<br>(Use several sheets if necessary)   |     |  |  | Applicant<br>Jeffrey T. Ellis     |                            |
|  |     |  |  | Filing Date<br>September 28, 2001 |                            |
| Group Art Unit<br>Unknown  |     |  |  |                                   |                            |
| <b>OTHER DOCUMENTS</b> (Including Author, Title, Date, Pertinent Pages, etc.)  |     |  |  |                                   |                            |
| J4   | C11 | Pontie et al., <i>Improvement In The Performance Of A Nickel Complex-Based Electrochemical Sensor For The Detection Of Nitric Oxide In Solution</i> , Sensors and Actuators, 1999, B56:1-5.                  |  |                                   |                            |
|  | C12 | Privat et al., <i>Direct Electrochemical Characterization Of Superoxide Anion Production And Its Reactivity Toward Nitric Oxide In Solution</i> , Journal of Electroanalytical Chemistry, 1997, 436:261-265. |  |                                   |                            |
|  | C13 | Privat et al., <i>Superoxide Release From Interleukin-1B-Stimulated Human Vascular Cells: In Situ Electrochemical Measurement</i> , Free Radic. Biol. Med., 1999, 27:554-559.                                |  |                                   |                            |
|  | C14 | Scheller et al., <i>Cytochrome C Based Superoxide Sensor For In Vivo Application</i> , Electroanalysis, 1999, 11:703-706.  |  |                                   |                            |
| J4   | C15 | Tammeveski et al., <i>Superoxide Electrode Based On Covalently Immobilized Cytochrome C: Modelling Studies</i> , Free Radic. Biol. Med., 1998, 25:973-978.   |  |                                   |                            |
| EXAMINER   |     | DATE CONSIDERED 6/27/03  |  |                                   |                            |
| EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.<br>Include copy of this form with next communication to applicant. |     |  |  |                                   |                            |

RECEIVED

JUL 08 2002

TECHNOLOGY CENTER R3700

FORM PTO-1449 (Modified)

Approved for use through 10/31/2002

US DEPARTMENT OF COMMERCE  
US Patent and Trademark Office

Docket No.

50623.55

Application No.

09/967,186

Applicant

Jeffrey T. Ellis

Filing Date

September 28, 2001

Group Art Unit

3763

**INFORMATION DISCLOSURE CITATION  
in an Application**

(Use several sheets if necessary)

**U.S. PATENT DOCUMENTS**

| Examiner<br>Initial | Ref. No. | Document<br>Number | Date of<br>Patent | Name | Class | Subclass | Filing Date if<br>Appropriate |
|---------------------|----------|--------------------|-------------------|------|-------|----------|-------------------------------|
|                     | A1       |                    |                   |      |       |          |                               |

**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initial | Ref. No. | Document<br>Number | Date of<br>Publication | Country | Class | Subclass | Translation<br>Yes No |
|---------------------|----------|--------------------|------------------------|---------|-------|----------|-----------------------|
|                     | B1       |                    |                        |         |       |          |                       |

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, etc.)

|    |    |  |
|----|----|--|
| JF | C1 | Ehrenreich-Forster et al., <i>Biosensor For In-Vivo Measurement of Superoxide Radicals</i> , Biospektrum, 1997, 4:34-37 (English Translation). |
| JF | C2 | Malinski et al., <i>Direct Measurement Of Nitric Oxide In The Cardiovascular System</i> , Physiol. Res., 1996, 45:279-284.                     |

EXAMINER

DATE CONSIDERED

5/23/03

EXAMINER: Initial if references considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered.  
Include copy of this form with next communication to applicant.

RECEIVED

AUG - 8 2002

TECHNOLOGY CENTER 35700